



**FOR IMMEDIATE RELEASE**

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### **ODVA Adds Time Synchronization Services for Real-Time Control to EtherNet/IP™ and DeviceNet™**

HANNOVER, Germany, April 7, 2003 — ODVA today announced plans to add time synchronization services for real-time control applications to its Common Industrial Protocol (CIP™). With the addition of these services to CIP, called CIPsync™, OEMs and manufacturers will benefit from expanded application coverage of DeviceNet and EtherNet/IP systems. This includes sequence of events recording, distributed motion control and other highly distributed applications requiring increased control coordination.

CIPsync will be based on the recent IEEE-1588™ standard — Precision Clock Synchronization Protocol for Networked Measurement and Control Systems — which is designed for local area networks like Ethernet that support multicast messaging. Because this profile matches the CIP-based producer/consumer networks from ODVA, the time synchronization standard is ideally suited to both DeviceNet and EtherNet/IP.

“ODVA’s adoption of the IEEE-1588 standard validates its significance as a key enabling technology for next-generation industrial networks,” said John C. Eidson, chairperson of the IEEE-1588 Working Group. “Users of multi-cast networks such as EtherNet/IP and DeviceNet can now look forward to future products from ODVA members that will allow accurate real-time synchronization of devices and controllers connected over these networks.”

CIPsync will allow users to base control on true time synchronization rather than the more limited event synchronization model used historically. In addition, CIPsync will allow EtherNet/IP users to take advantage of commercial-off-the-shelf (COTS) Ethernet hardware, and standardize on network architectures fully compatible with TCP/IP and UDP/IP.

Using a 100Mbps switched Ethernet system, testing has shown that CIPsync can deliver time synchronization accuracy of less than 500 nanoseconds between devices—a requirement for the most demanding real-time applications.

“CIPsync will simplify installations using industrial Ethernet for real-time control,” said Katherine Voss, ODVA executive director. “We fully expect that CIPsync, combined with on-going performance improvements in commercially available microprocessors and standard features offered by many of today’s Ethernet switches, will eliminate the need for special-purpose components and communication protocols for all real-time applications.”

The CIP System Architecture Special Interest Group (SIG) has assumed leadership for defining the implementation process and project milestones for CIPsync. This SIG will initially focus on two deliverables:

1. Defining the necessary CIP objects required to leverage the IEEE-1588 standard on both EtherNet/IP and DeviceNet.
2. Working with the IEEE-1588 committee to adapt the standard to provide specifics needed for application on DeviceNet.

ODVA expects the CIP specification enhancements to be completed in 2003.

### **About ODVA**

ODVA is an international association comprised of members from the world's leading automation companies. Collectively, ODVA and its members support network technologies based on the Common Industrial Protocol (CIP™). These currently include DeviceNet™, EtherNet/IP™ and CIPsafety™. ODVA manages the development of these open technologies, and assists manufacturers and users of CIP-based networks through tools, training and marketing activities. In addition, ODVA offers conformance testing to help ensure that products built to its specifications operate in multi-vendor systems. ODVA also is active in other standards development organizations and industry consortia to drive the growth of open communication standards. For more information, visit its web site at [www.odva.org](http://www.odva.org).

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